

What is claimed is:

1. An evaporator for receiving heat generated at a heat generation unit, comprising:

- a) a liquid reservoir for accommodating liquid-phase working fluid;
- b) a liquid supply port for supplying liquid-phase working fluid to the liquid reservoir;
- c) a vapor ejection port for ejecting from the evaporator, working fluid vaporized at the evaporator; and
- d) a liquid ejection port for ejecting from the evaporator, liquid-phase working fluid accommodated in the liquid reservoir.

2. A thermal transport system comprising : an evaporator for receiving heat generated at a heat generation unit, wherein the evaporator comprises:

- a) a liquid reservoir for accommodating liquid-phase working fluid;
- b) a liquid supply port for supplying liquid-phase working fluid to the liquid reservoir;
- c) a vapor ejection port for ejecting from the evaporator, working fluid vaporized at the evaporator; and
- d) a liquid ejection port for ejecting from the evaporator, liquid-phase working fluid accommodated in the liquid reservoir.

3. The thermal transport system according to claim 2, further comprising a reservoir tank for adjusting an amount of liquid-phase working fluid, wherein the liquid ejection port is connected to the reservoir tank.

4. The thermal transport system according to claim 3, comprising:

a) a liquid amount measuring sensor for measuring an amount of liquid-phase working fluid accommodated in the liquid reservoir; and  
b) a liquid amount controller for controlling by using the reservoir tank, the amount of liquid-phase working fluid accommodated in the liquid reservoir based on a measured data of the liquid amount measuring sensor.

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5. The thermal transport system according to claim 4, wherein the liquid amount measuring sensor is one of a temperature sensor and a pressure sensor.

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6. A heat absorber comprising : a plurality of evaporators serially connected in different positions for receiving heat generated at heat generation units, wherein each evaporator comprises:

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- a) a liquid reservoir for accommodating liquid-phase working fluid;
- b) a liquid supply port for supplying liquid-phase working fluid to the liquid reservoir;
- c) a vapor ejection port for ejecting from the evaporator, working fluid vaporized at the evaporator ; and
- d) a liquid ejection port for ejecting from the evaporator, liquid-phase working fluid accommodated in the liquid reservoir.

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7. The heat absorber according to claim 6, wherein the liquid ejection port of the evaporator excluding the evaporator of the last position is connected to the liquid supply port of the evaporator of the next position.

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8. The heat absorber according to claim 6, further comprising a

reservoir tank for adjusting an amount of liquid-phase working fluid, wherein the liquid ejection port of the evaporator of the last position is connected to the reservoir tank.

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9. The heat absorber according to claim 6, wherein a capacity of the liquid reservoir of the evaporator of the last position is larger than a capacity of the liquid reservoir of the evaporator of other positions.

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10. The heat absorber according to claim 8, comprising:

a) a liquid amount measuring sensor for measuring an amount of liquid-phase working fluid accommodated in the liquid reservoir of an evaporator out of the plurality of evaporators; and

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b) a liquid amount controller for controlling by using the reservoir tank, the amount of liquid-phase working fluid accommodated in the liquid reservoir of each evaporator based on measured data of the liquid amount measuring sensor.

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11. The heat absorber according to claim 10, wherein the liquid amount measuring sensor measures the amount of liquid-phase working fluid accommodated in the liquid reservoir of the evaporator of the last position only, and the liquid amount controller controls by using the reservoir tank, the amount of liquid-phase working fluid accommodated in the liquid reservoir of each evaporator based on one single measured data of the liquid amount measuring sensor.

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12. The heat absorber according to claim 10, wherein the liquid amount measuring sensor measures the amount of liquid-phase

working fluid accommodated in the liquid reservoirs of the plurality of evaporators, and the liquid amount controller controls by using the reservoir tank, the amount of liquid-phase working fluid accommodated in the liquid reservoir of each evaporator based on a plurality of measured data of the liquid amount measuring sensor.

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13. The heat absorber according to claim 10, wherein the reservoir tank has a plurality of tanks of various size of capacity, and wherein the liquid amount controller controls by using a tank out of the plurality of tanks, the amount of liquid-phase working fluid accommodated in the liquid reservoir of each evaporator based on measured data of the liquid amount measuring sensor.

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14. The heat absorber according to claim 10, wherein the liquid amount measuring sensor is one of a temperature sensor and a pressure sensor.

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15. A thermal transport system comprising: a plurality of evaporators serially connected in different positions for receiving heat generated at heat generation units and a condenser for rejecting heat, wherein each evaporator comprises:

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- a) a liquid reservoir for accommodating liquid-phase working fluid;
- b) a liquid supply port for supplying liquid-phase working fluid to the liquid reservoir;
- c) a vapor ejection port for ejecting from the evaporator, working fluid vaporized at the evaporator ; and
- d) a liquid ejection port for ejecting from the evaporator, liquid-phase working fluid accommodated in the liquid reservoir.

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16. The thermal transport system according to claim 15, wherein the liquid ejection port of the evaporator excluding the evaporator of the last position is connected to the liquid supply port of the evaporator of the next position.

17. The thermal transport system according to claim 15, further comprising a reservoir tank for adjusting an amount of liquid-phase working fluid, wherein the liquid ejection port of the evaporator of the last position is connected to the reservoir tank.

18. The thermal transport system according to claim 15, wherein a capacity of the liquid reservoir of the evaporator of the last position is larger than a capacity of the liquid reservoir of the evaporator of other positions.

19. The thermal transport system according to claim 17, comprising

- a) a liquid amount measuring sensor for measuring an amount of liquid-phase working fluid accommodated in the liquid reservoir of an evaporator out of the plurality of evaporators; and
- b) a liquid amount controller for controlling by using the reservoir tank, the amount of liquid-phase working fluid accommodated in the liquid reservoir of each evaporator based on measured data of the liquid amount measuring sensor.

20. The thermal transport system according to claim 19, wherein the liquid amount measuring sensor measures the amount of

liquid-phase working fluid accommodated in the liquid reservoir of the evaporator of the last position only, and the liquid amount controller controls by using the reservoir tank, the amount of liquid-phase working fluid accommodated in the liquid reservoir of each evaporator based on one single measured data of the liquid amount measuring sensor.

21. The thermal transport system according to claim 19, wherein the liquid amount measuring sensor measures the amount of liquid-phase working fluid accommodated in the liquid reservoirs of the plurality of evaporators, and the liquid amount controller controls by using the reservoir tank, the amount of liquid-phase working fluid accommodated in the liquid reservoir of each evaporator based on a plurality of measured data of the liquid amount measuring sensor.

22. The thermal transport system according to claim 19, wherein the reservoir tank has a plurality of tanks of various size of capacity, and wherein the liquid amount controller controls by using a tank out of the plurality of tanks, the amount of liquid-phase working fluid accommodated in the liquid reservoir of each evaporator based on measured data of the liquid amount measuring sensor.

23. The thermal transport system according to claim 19, wherein the liquid amount measuring sensor is one of a temperature sensor and a pressure sensor.

24. The thermal transport system according to claim 15, wherein each evaporator further comprises a vapor line for supplying vapor

vaporized at each evaporator to the condenser, and one vapor line meets with the other vapor lines at acute angle.

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25. The thermal transport system according to claim 15, wherein each evaporator further comprises a vapor line for supplying vapor vaporized at each evaporator to the condenser, and a bore size of the vapor line is widen as one vapor line meets the other vapor lines.

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26. A thermal transport method using an evaporator for receiving heat generated at a heat generation unit, comprises steps of:

- a) supplying liquid-phase working fluid to the evaporator;
- b) accommodating in the evaporator, liquid-phase working fluid supplied to the evaporator by the supplying step;
- c) ejecting from the evaporator, working fluid vaporized at the evaporator ; and
- d) ejecting from the evaporator, liquid-phase working fluid supplied to the evaporator by the supplying step and accommodated in the evaporator by the accommodating step.

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